CLAIMS

What is claimed is:

1. A method of routing a flow of frames for a core-edge switch configuration comprising:

receiving at least one frame of said flow of frames at an edge switch of said configuration;

applying a process to select a route from said edge switch to a core switch for said at least one frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration;

transmitting said at least one frame.

2. The method of claim 1, wherein said process comprises a pseudo-random process.

3. The method of claim 2, wherein applying said pseudo-random process comprises applying a hash function.

4. The method of claim 3, wherein said hash function is also applied to a set of possible routes to external exit ports of a core switch of said configuration to balance the flow of frames out said external exit ports.

5. The method of claim 3, wherein said hash function is also applied to a set of possible routes to external exit ports of edge switches of said configuration to balance the flow of frames out said external exit ports.

6. The method of claim 3, wherein said hash function is also applied to possible routes through said configuration to balance the flow of frames through said configuration to a particular external exit port of said configuration.

7. The method of claim 6, wherein an external exit port of said configuration comprises an external exit port of an edge switch of said configuration.

8. The method of claim 3, wherein said hash function is also applied to possible routes through said configuration to balance the flow of frames through said configuration to selected external exit ports of said configuration.

9. The method of claim 8, wherein external exit ports of said configuration comprise external exit ports of edge switches of said configuration.

10. The method of claim 1, wherein a weight is respectively assigned to at least some respective ones of said exit ports of a core switch of said configuration;

and further comprising: applying a process to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core-edge switch configuration by employing the weights to select an exit port of said core switch that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

11. The method of claim 10, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

12. The method of claim 10, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

13. The method of claim 10, wherein said weights at least in part reflect consumed bandwidth for particular routes.

14. The method of claim 10, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein applying a process to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration further comprises employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

15. The method of claim 14, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

16. The method of claim 14, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

17. The method of claim 14, wherein said multiple weights at least in part reflect consumed bandwidth for particular routes.

18. The method of claim 10, wherein at least some of said links are to one or more other switches in a switch fabric.

19. The method of claim 1, wherein a weight is respectively assigned to at least some respective ones of said exit ports of said configuration;

and further comprising: applying a process to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core-edge switch configuration by employing the weights to select an exit port of said configuration that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

20. The method of claim 19, wherein exit ports of said configuration comprise exit ports of edge switches of said configuration.

21. The method of claim 19, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

22. The method of claim 19, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

23. The method of claim 19, wherein said weights at least in part reflect consumed bandwidth for particular routes.

24. The method of claim 19, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein applying a process to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration further comprises employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

25. The method of claim 24, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

26. The method of claim 24, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

27. The method of claim 24, wherein said multiple weights at least in part reflect consumed bandwidth for particular routes.

28. The method of claim 14, wherein at least some of said links are to one or more other switches in a switch fabric.

29. The method of claim 1, wherein said route is selected based at least in part on a source tag and/or a destination tag added to said frame after said frame enters a switch of said core-edge switch configuration.

30. The method of claim 29, wherein said source tag and/or said destination tag is stripped off said frame before said frame exits said core switch.

31. The method of claim 29, wherein said switch comprises a core switch.

32. The method of claim 1, wherein said switches of said configuration comprise fibre channel compliant switches.

33. A switch fabric comprising:

at least a first switch and a second switch, said first and said second switch being communicatively coupled;

said first switch including a processor and memory;

said first switch being adapted to select a route for a frame of said flow of frames from an edgeswitch to a core switch so as to potentially reduce frame traffic congestion in a core-edge switch configuration.

34. The switch fabric of claim 33, wherein said first switch is adapted to pseudo-randomly select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration.

35. The switch fabric of claim 34, wherein said first switch is adapted to pseudo-randomly select a route by applying a hash function.

36. The switch fabric of claim 35, wherein said first switch is also adapted to apply said hash function to a set of possible routes to external exit ports of a core switch of said configuration to balance the flow of frames out said external exit ports.

37. The switch fabric of claim 35, wherein said first switch is also adapted to apply said hash function to a set of possible routes to external exit ports of edge switches of said configuration to balance the flow of frames out said external exit ports.

38. The switch fabric of claim 35, wherein said first switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow of frames through said configuration to a particular external exit port of said configuration.

39. The switch fabric of claim 38, wherein an external exit port of said

configuration comprises an external exit port of an edge switch of said configuration.

40. The switch fabric of claim 35, wherein said first switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow of frames through said configuration to selected external exit ports of said configuration.

41. The switch fabric of claim 40, wherein external exit ports of said configuration comprise external exit ports of edge switches of said configuration.

42. The switch fabric of claim 33, wherein a weight is respectively assigned to at least some respective ones of said exit ports of a core switch of said configuration;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said core switch that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

43. The switch fabric of claim 42, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

44. The switch fabric of claim 42, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

45. The switch fabric of claim 42, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

46. The switch fabric of claim 42, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

47. The switch fabric of claim 46, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

48. The switch fabric of claim 46, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

49. The switch fabric of claim 46, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

50. The switch fabric of claim 42, wherein at least some of said links are to one or more other switches in a switch fabric.

51. The switch fabric of claim 33, wherein a weight is respectively assigned to at least some respective ones of said exit ports of said configuration;

wherein said first switch is further adapted to select a route for a frame of said flow frames so as to potentially reduce frame traffic congestion in said core- edge

switch configuration by employing the weights to select an exit port of said configuration that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

52. The switch fabric of claim 51, wherein exit ports of said configuration comprise exit ports of edge switches of said configuration.

53. The switch fabric of claim 51, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

54. The switch fabric of claim 51, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

55. The switch fabric of claim 51, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

56. The switch fabric of claim 51, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

57. The switch fabric of claim 56, wherein as good as or better in terms of

achieving an objective function comprises obtaining a higher value objective function.

58. The switch fabric of claim 56, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

59. The switch fabric of claim 56, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

60. The switch fabric of claim 51, wherein at least some of said links are to one or more other switches in a switch fabric.

61. The switch fabric of claim 33, wherein said first switch is adapted to select said route based at least in part on a source tag and/or a destination tag added to said frame after said frame enters a switch of said core-edge switch configuration.

62. The switch fabric of claim 61, wherein said first switch is adapted to strip said source tag and/or said destination tag off said frame before said frame exits said first switch.

63. The switch fabric of claim 62, wherein said first switch comprises a core switch.

64. The switch fabric of claim 33, wherein said first switch comprises a fibre channel compliant switch.

65. An apparatus comprising:

a switch, said switch including a processor and memory;

said switch further having the capability to balance a flow of frames exiting said switch;

said switch being adapted to select a route for a frame of said flow of frames from an edge switch to a core switch so as to potentially reduce frame traffic congestion in a core- edge switch configuration.

66. The apparatus of claim 65, wherein said switch is adapted to pseudo-randomly select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration.

67. The apparatus of claim 66, wherein said switch is adapted to pseudo-randomly select a route by applying a hash function.

68. The apparatus of claim 67, wherein said switch is also adapted to apply said hash function to a set of possible routes to external exit ports of a core switch of said configuration to balance the flow of frames out said external exit ports.

69. The apparatus of claim 67, wherein said switch is also adapted to apply said hash function to a set of possible routes to external exit ports of edge switches of said configuration to balance the flow of frames out said external exit ports.

70. The apparatus of claim 67, wherein said switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow of frames through said configuration to a particular external exit port of said configuration.

71. The apparatus of claim 70, wherein an external exit port of said configuration comprises an external exit port of an edge switch of said configuration.

72. The apparatus of claim 67, wherein said switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow of frames through said configuration to selected external exit ports of said configuration.

73. The apparatus of claim 72, wherein external exit ports of said configuration comprise external exit ports of edge switches of said configuration.

74. The apparatus of claim 65, wherein a weight is respectively assigned to at least some respective ones of said exit ports of a core switch of said configuration;

wherein said switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said core switch that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

75. The apparatus of claim 74, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

76. The apparatus of claim 74, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

77. The apparatus of claim 74, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

78. The apparatus of claim 74, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration comprises by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

79. The apparatus of claim 67, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

80. The apparatus of claim 67, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

81. The apparatus of claim 67, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

82. The apparatus of claim 74, wherein at least some of said links are to one or more other switches in a switch fabric.

83. The apparatus of claim 65, wherein a weight is respectively assigned to at least some respective ones of said exit ports of said configuration;

wherein said switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said

configuration that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

84. The apparatus of claim 83, wherein exit ports of said configuration comprise exit ports of edge switches of said configuration.

85. The apparatus of claim 83, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

86. The apparatus of claim 83, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

87. The apparatus of claim 83, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

88. The apparatus of claim 83, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

89. The apparatus of claim 88, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

90. The apparatus of claim 88, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

91. The apparatus of claim 88, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

92. The apparatus of claim 83, wherein at least some of said links are to one or more other switches in a switch fabric.

93. The apparatus of claim 65, wherein said switch is adapted to select said route based at least in part on a source tag and/or a destination tag added to said frame after said frame enters a switch of said core-edge switch configuration.

94. The apparatus of claim 93, wherein said switch is adapted to strip said source tag and/or said destination tag off said frame before said frame exits said switch.

95. The apparatus of claim 65, wherein said switch comprises a fibre channel compliant switch.

96. The apparatus of claim 65, wherein said switch comprises a core switch of said core-edge switch configuration.

97. A network comprising:

a host;

a physical storage unit;

a first switch and a second switch communicatively coupled to form a switch fabric;

said first switch and said second switch further communicatively coupled to said host and said physical storage unit;

said first switch at least including a processor and memory;

said first switch being adapted to select a route for a frame of said flow of frames from an edge switch to a core switch so as to potentially reduce frame traffic congestion in a core-edge switch configuration.

98. The network of claim 97, wherein said first switch is adapted to pseudo-randomly select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration.

99. The network of claim 98, wherein said first switch is adapted to pseudo-randomly select a route by applying a hash function.

100. The network of claim 99, wherein said first switch is also adapted to apply said hash function to a set of possible routes to external exit ports of a core switch of said configuration to balance the flow of frames out said external exit ports.

101. The network of claim 99, wherein said first switch is also adapted to apply said hash function to a set of possible routes to external exit ports of edge switches of said configuration to balance the flow of frames out said external exit ports.

102. The network of claim 99, wherein said first switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow

of frames through said configuration to a particular external exit port of said configuration.

103. The network of claim 102, wherein an external exit port of said configuration comprises an external exit port of an edge switch of said configuration.

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104
~~103~~ The network of claim 99, wherein said first switch is also adapted to apply said hash function to possible routes through said configuration to balance the flow of frames through said configuration to selected external exit ports of said configuration.

105
~~104~~. The network of claim 103, wherein external exit ports of said configuration comprise external exit ports of edge switches of said configuration.

106
~~105~~. The network of claim 97, wherein a weight is respectively assigned to at least some respective ones of said exit ports of a core switch of said configuration;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said core switch that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

107
~~106~~. The network of claim 105, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

108
~~107~~. The network of claim 105, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

109
~~108~~. The network of claim 105, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

110
~~109~~. The network of claim 105, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

111
~~110~~. The network of claim 109, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

112
~~111~~. The network of claim 109, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

113
~~112~~. The network of claim 109, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

114
~~113~~. The network of claim 105, wherein at least some of said links are to one or more other switches in a switch fabric.

115
~~114~~. The network of claim 97, wherein a weight is respectively assigned to at least some respective ones of said exit ports of said configuration;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said configuration that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

116
~~115.~~ The network of claim 114, wherein exit ports of said configuration comprise exit ports of edge switches of said configuration.

117
~~116~~ The network of claim 114, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

118
~~117.~~ The network of claim 114, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

119
~~118.~~ The network of claim 114, wherein said weights are adapted to at least in part reflect consumed bandwidth for particular routes.

120
~~119.~~ The network of claim 114, wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

wherein said first switch is further adapted to select a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

121
~~120.~~ The network of claim 119, wherein as good as or better in terms of achieving an objective function comprises obtaining a higher value objective function.

122
~~121.~~ The network of claim 119, wherein as good as or better in terms of achieving an objective function comprises obtaining a lower value objective function.

123
~~122.~~ The network of claim 119, wherein said multiple weights are adapted to at least in part reflect consumed bandwidth for particular routes.

124
~~123.~~ The network of claim 114, wherein at least some of said links are to one or more other switches in a switch fabric.

125
~~124.~~ The network of claim 97, wherein said first switch is adapted to select said route based at least in part on a source tag and/or a destination tag added to said frame after said frame enters a switch of said core-edge switch configuration.

126
~~125.~~ The network of claim 97, wherein said first switch is adapted to strip said source tag and/or said destination tag off said frame before said frame exits said first switch.

127
~~126.~~ An article comprising: a storage medium having stored thereon instructions that, when executed, result in performance of a method of balancing a flow of frames exiting a switch that includes the following:

applying a process to select a route for a frame of said flow of frames from an edge switch to a core switch so as to potentially reduce frame traffic congestion in a core- edge switch configuration.

128
~~127~~. The article of claim 126, wherein said instructions, when executed, further result in: pseudo-randomly selecting a route for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration.

129
~~128~~. The article of claim 127, wherein said instructions, when executed, further result in: pseudo-randomly selecting a route by applying a hash function.

130
~~129~~. The article of claim 128, wherein said instructions, when executed, further result in: applying said hash function to a set of possible routes to external exit ports of a core switch of said configuration to balance the flow of frames out said external exit ports.

131
~~130~~. The article of claim 128, wherein said instructions, when executed, further result in: applying said hash function to a set of possible routes to external exit ports of edge switches of said configuration to balance the flow of frames out said external exit ports.

132
~~131~~. The article of claim 128, wherein said instructions, when executed, further result in: applying said hash function to possible routes through said configuration to balance the flow of frames through said configuration to a particular external exit port of said configuration.

133
~~132~~. The article of claim 131, wherein said instructions, when executed, further result in: an external exit port of said configuration comprising an external exit port of an edge switch of said configuration.

134
~~133~~. The article of claim 128, wherein said instructions, when executed, further

result in: applying said hash function to possible routes through said configuration to balance the flow of frames through said configuration to selected external exit ports of said configuration.

135
~~134~~. The article of claim 133, wherein said instructions, when executed, further result in: external exit ports of said configuration comprising external exit ports of edge switches of said configuration.

136
~~135~~. The article of claim 126, wherein said instructions, when executed, further result in: a weight being respectively assigned to at least some respective ones of said exit ports of a core switch of said configuration;

and, further result in: a route being selected for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said core switch that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

137
~~136~~. The article of claim 135, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a higher value objective function.

138
~~137~~. The article of claim 135, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a lower value objective function.

139
~~138~~. The article of claim 135, wherein said instructions, when executed, further result in: said weights being adapted to at least in part reflect consumed bandwidth

for particular routes.

140
~~139.~~ The article of claim 135, wherein said instructions, when executed, further result in: at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports; and

further result in: a route being selected for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

141
~~140.~~ The article of claim 139, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a higher value objective function.

142
~~141.~~ The article of claim 139, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a lower value objective function.

143
~~142.~~ The article of claim 139, wherein said instructions, when executed, further result in: said multiple weights being adapted to at least in part reflect consumed bandwidth for particular routes.

144
~~143.~~ The article of claim 126, wherein said instructions, when executed, further result in: a weight being respectively assigned to at least some respective ones of said exit ports of said configuration; and

further result in: a route being selected for a frame of said flow of frames so

as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing the weights to select an exit port of said configuration that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

145
~~144~~. The article of claim 143, wherein said instructions, when executed, further result in: exit ports of said configuration comprising exit ports of edge switches of said configuration.

146
~~145~~. The article of claim 143, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a higher value objective function.

147
~~146~~. The article of claim 143, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a lower value objective function.

148
~~147~~. The article of claim 143, wherein said instructions, when executed, further result in: said weights being adapted to at least in part reflect consumed bandwidth for particular routes.

149
~~148~~. The article of claim 143, wherein said instructions, when executed, further result in: wherein at least some exit ports have multiple weights reflecting routes from the particular exit port to multiple respective destination ports;

and further result in: a route being selected for a frame of said flow of frames so as to potentially reduce frame traffic congestion in said core- edge switch configuration by employing said multiple weights to select an exit port that is as good

as or better than alternative exit ports in terms of achieving an objective reflected by said weights.

150
~~149.~~ The article of claim 148, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a higher value objective function.

151
~~150.~~ The article of claim 148, wherein said instructions, when executed, further result in: as good as or better in terms of achieving an objective function comprising obtaining a lower value objective function.

152
~~151.~~ The article of claim 148, wherein said instructions, when executed, further result in: said multiple weights being adapted to at least in part reflect consumed bandwidth for particular routes.

153
~~152.~~ The article of claim 126, wherein said instructions, when executed, further result in: said route being selected based at least in part on a source tag and/or a destination tag added to said frame after said frame enters a switch of said core-edge switch configuration.

154
~~153.~~ The article of claim 152, wherein said instructions, when executed, further result in: said source tag and/or said destination tag being stripped off said frame before said frame exits said switch.

155
~~154.~~ An article comprising: a storage medium having stored thereon instructions that, when executed, result in initializing a switch to balance a flow of frames exiting said switch that includes the following:

initializing said switch to apply a process to select a route for a frame of said flow of frames from said switch to a core switch so as to potentially reduce frame traffic congestion in a core-edge switch configuration.

156
~~155.~~ The article of claim 155, wherein said instructions, when executed, further result in: said switching being initialized to apply a pseudo-random process.

157
~~156.~~ The article of claim 155, wherein said instructions, when executed, further result in: said switch being initialized to apply a hash function being to a set of parameters associated with frames exiting said switch.

158
~~157.~~ The article of claim 154, wherein said instructions, when executed, further result in: said switch being initialized to assign a weight to at least some respective exit ports of said switch; and said switch being initialized to apply a process to select an exit port for a frame of said flow to exit so as to balance said flow of frames exiting said switch by employing the weights to select an exit port that is as good as or better than alternative exit ports in terms of achieving an objective reflected by said weights.